

KATINAS, V. Ya.

Comparative data on changes in the higher nervous activity of dogs in false and true pregnancies [with summary in English].  
Biul.eksp.biol. i med. 45 no.3:11-14 Mr'58 (MIRA 11:5)

1. Iz laboratorii normal'noy i patologicheskoy fiziologii (zav. - prof. N.L. Garmasheva) Instituta akusherstva i ginekologii AMN SSSR i fiziologicheskogo otdela imeni I.P. Pavlova (zav. - deystvitel'nyy chlen AMN SSSR P.S. Kupalov) Instituta eksperimental'noy meditsiny (dir. - chlen-korrespondent AMN SSSR D.A. Biryukov) AMN SSSR, Leningrad. Predstavlena deystvitel'nyy chlenom AMN SSSR P.S. Kupalovym)

(CENTRAL NERVOUS SYSTEM, physiology,

higher nervous activity in true & false preg. in / dogs (Rus))

(PREGNANCY,

false & true, eff. on higher nervous activity in dogs (Rus))

ACCESSION NR: AP4031819

BR  
S/0247/64/014/002/0318/0325

AUTHOR: Katinas, V. Ya.

TITLE: Comparative physiology of higher brain part tonus

SOURCE: Zhurnal vysshey nervnoy deyatel'nosti, v. 14, no. 2, 1964,  
318-325

TOPIC TAGS: higher brain part, tonus formation, tonus control  
mechanism, cat higher brain part, pigeon higher brain part, condition-  
ed reflex change, cardiac conditioned reflex, respiratory conditioned  
reflex, light stimulus, unconditioned reflex mechanism

ABSTRACT: Tonus formation and control mechanisms of higher brain  
parts were investigated in cats and pigeons by a comparative physio-  
logy method using light as a stimulus. Experimental cats and pigeons  
were kept in a vivarium under different lighting conditions with 5  
cats and 10 pigeons living under normal lighting and 2 cats living in  
darkness for 2 mos. A motor defense conditioned reflex to a tone of  
1000 cps, 60 db reinforced with electric current applied to the body  
was developed in all the cats and in 6 pigeons. A conditioned reflex

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to 1000 cps, 60 db reinforced with ammonia vapor was developed in the remaining 4 pigeons. In a series of experiments the cardiac and respiratory components of the conditioned reflexes were determined under initial conditions and under different lighting conditions. Findings show that the general tonus of the higher brain parts depends on the intensity of the external stimuli. The cats and pigeons accustomed to normal lighting conditions display a significant decrease in cardiac and respiratory conditioned reflexes under conditions of darkness and an increase under conditions of light. These conditioned reflex changes under conditions of darkness or light take place gradually indicating the presence of a conditioned reflex control mechanism of the higher brain part cortex tonus. The cats living under sharply reduced lighting conditions display a marked increase in cardiac and respiratory conditioned reflexes under conditions of darkness. These changes, involving the reorganization of higher brain part tonus, are related to ecological characteristics of the domestic cat which is biologically a night predator. Cardiac and respiratory conditioned reflexes in pigeons change almost immediately in relation to new conditions. Thus, functional control of higher brain parts in pigeons appears to be accomplished by an uncondi-

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ACCESSION NR: AP4031819

tioned reflex mechanism and is related to the morphological structure of the brain. Conditioned reflex changes of cardiac activity in pigeons are more responsive and are a far more accurate index of the functional state of the higher brain parts than respiratory changes. Orig. art. has: 4 figures.

ASSOCIATION: Laboratoriya sravnitel'noy fiziologii i patologii IEM AMN SSSR (Comparative Physiology and Pathology Laboratory IEM AMN SSSR)

SUBMITTED: 13Apr63

ENCL: 00

SUB CODE: 13

NR REF SOV: 026

OTHER: 002

Card: 3/3

**"APPROVED FOR RELEASE: 06/13/2000**

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**CIA-RDP86-00513R000721120004-4"**

reinforcement with unconditioned stimulus was applied 1 sec. The conditioned stimulus was applied twice. Respiratory motor activity initiated tone (500 cps, 60 db) was applied twice. Respiratory motor activity recorded by a 4 channel oscillograph served as indicator of the state of the higher regions of the

the tone of the higher regions  
art. has: 2 figures.

physiology -

L 11382-65

ACCESSION NR: APh042354

AN PAT

Card 3/3



YARG LEVA, M.I.; KATUNOV, V.Ia.

Characteristics of cardiac and respiratory components of conditioned defensive response. Zhur. vys. nerv. deiat. 15 no. 1:109-113 Ja-F '65. (MIRA 18:5)

1. Otdel sravnitel'noy fiziologii i patologii Instituta eksperimental'noy meditsiny ANU SSSR.

KATINAS, Ye. A., Cand Med Sci -- (diss) "Local intravenous  
Anesthesia in the Extremities." Vil'nyus, 1958, 21 pp  
(Min of Higher Education of USSR. Vil'nyus~~sky~~ State Univ  
im V. Kapsukas, <sup>Med Faculty</sup>), 100 copies (KL, hl-58, 122)

-38-

KATININ, A.Ye.; SHAMURIN, V.F.

Reproduction of some trees and shrubs in burns in the Korf  
Bay region (Koryak National Area). Bot. zhur. 48 no.9:1282-  
1297 S '63. (MIRA 16:11)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR,  
Leningrad.

KATINSKAYA, Yu. K.

"Strawberry Species in the Northwest Zone of the USSR." Cand  
Agr Sci, All-Union Inst of Plant Growing, Leningrad, 1953. (RZhBiol,  
No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR  
Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

KATINSKAYA, Yu.K., kand. sel'skokhozyaystvennykh nauk

Strawberry breeding in the U.S.S.R. Agrobiologiya no.6:  
943-949 N-D '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut rasteniye-  
vodstva, Leningrad.

KATINSKAYA, Y. K.

USSR/Cultivated Plants - Fruits. Berries.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15780  
Author : Yu. K. Katinskaya  
Inst : The All-Union Plant Raising Institute.  
Title : New Strawberry Varieties Selected by the All-Union  
Plant Raising Institute.  
(Novyye sorta zemlyaniki selektsii VIR).  
Orig Pub : Byul. Vses. in-ta rasteniyevodstva. VASKhNIL, 1956,  
No 2, 35-36.  
Abstract : Strawberry selection at the All-Union Plant Raising  
Institute began in 1934 at the Pavlov Experimental Base  
and then at the Central Asian and Maykop Testing Sta-  
tions. At that time 22 new varieties were introduced  
of which 12 were widely put into production and taken  
as the standard in a number of rayons.

Card 1/2

KATINSKAYA, Yuliya Konstantinovna

[Strawberries] Zemlianka. Leningrad, Izd-vo sel'khoz.  
lit-ry, zhurnalov i plakatov, 1961. 164 p.  
(MIRA 15:4)

(Strawberries)

KATINSKIY, F. F., Engineer

Stankinprom (1943).

"Equipment for Drilling Machines", Stanki I Instrument, 14, Nos. 7-8, 1943.

BR-52059019.



DAVYDOVSKIY, A. S.; SALETSKIY, F. F., Engineers

Stankinprom (-1944-)

"The Technological Equipment of Conveyor Production." Stanki I Instrument Vol. 15, No. 9, 1944

BR-52059019

KATINSKIY, F.F.; KAMINSKIY, Ya.A.

Self-opening screw-thread rolling heads. Stan.1 instr. 29 no.12:  
25-26 D '58. (MIRA 11:12)

(Taps and dies)

KATINSKIY, M.K.

AID P - 5340

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 19/24

Author : Katinskiy, M. K., Lt. Col.

Title : The term "twilight period" should be introduced

Periodical : Vest. vozd. flota, 12, 80, D 1956

Abstract : The author suggests that a new term "twilight period" should be introduced and that the pilots should be trained accordingly for "twilight flights".

Institution : None

Submitted : No date

KATIPOV, A. E.

10

PHASE I BOOK EXPLOITATION

SOV/5726

Moscow. Universitet.

Trudy seminarov po vektornomu i tenzornomu analizu s ikh prilozheniyami k geometrii, mekhanike i fizike. vyp. 11. (Transactions of the Seminar on Vector and Tensor Analysis With Their Application in Geometry, Mechanics, and Physics. no. 11) [Moscow] 1961. 314 p. 2,500 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

Ed. (Title page): P. K. Rashevskiy, Professor; Ed.: V. A. Gukovskaya; Tech. Ed.: K. S. Chistyakova.

PURPOSE: This book is intended for theoretical physicists, mathematicians, and engineers.

COVERAGE: The book contains reports presented at the Seminar on Vector and Tensor Analysis (Moscow, 1961), includes an annotated

Card 1/5

Transactions of the Seminar (Cont.)

SOV/5726

bibliography of some reports presented at Seminar meetings over the period 1 July 1954 through 31 December 1957, and reviews the life and works of Yakov Semenovich Dubnov (1887-1957), senior member and cofounder (with V. F. Kagan and others) of the Seminar. Professor Dubnov's contributions to mathematics are reviewed in some detail and include his teaching of analytical and differential geometry with the application of vector analysis and works on problems in the algebra of affinors. Dubnov also wrote Osnovy vektornogo ischisleniya (Principles of Vector Calculus), studied the general theory of nets on surfaces, and worked on studies of different types of nets and invariant characteristics of nets on surfaces, the central projective and affine theory of curves and surfaces, and related subjects. A chronological bibliography of his publications is included. The biographical sketch of Professor Dubnov was written by V. V. Vagner and A. M. Lopshits. No personalities are mentioned. References accompany individual articles.

Card 2/5

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10

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AVAILABLE: Library of Congress

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11-20-61



BALEV, P. (Troian); MUTAFCHIEV, D. (Burgas); PAPARO, A. (Sofia);  
ANCHEV, St. (Teteven); SAVOV, T. (Burgas); KOLEV, Tsv. (s. Stambolovo,  
Turnovsko); DANEV, M. (Ivailovgrad); RADEV, At. (Iambol);  
PETKOV, V. (Sofia); SIMEONOV, As. (Gara Bov); NEDEV, R. (Varna);  
KATIRANSKI, Iv. (s. Dragichevo, Pernishko); TRENCHIEV, TR. (St. Zagora);  
KURCHEV, G. (Sofia)

Solutions to mathematics problems from Vol. 5, no.5, 1962.  
Mat i fiz Bulg 6 no.2:61-63 Mr-Apr '63.

KATISHEV, V. S., YEFREMOV, D. V., MESHCHERYAKOV, M. G., MINTS, A. I.,  
DZHELEPOV, V. P., IVANOV, P. P., KOMAR, E. G., MONOSZON, N. A., NEVIASHSKIY, I. Kh  
POLYAKOV, B. I., CHESTNOY.

"The USSR Academy of Sciences' 6 Metre Synchrocyclotron," paper  
presented at CERN Symposium, 1956, appearing in Nuclear Instruments,  
No. 1, pp. 21-30, 1957

BETLHEIM, S.; BLAZEVIC, D.; BECK-DVORZAK, M.; BUCAN, N.; CIVIDINI, E.;  
KATIVIC, N.; RADOSEVIC, Z.

Role of psychological tests during psychotherapy of neurotic patients.  
Neuropsihijatrija 8 no.4:254-260 '60.

1. Iz Neurolosko-psihijatrijske klinike Medicinskog fakulteta  
Sveucilista u Zagrebu - Psihoterapijski odjel (Predstojnik, Prof.  
dr. R. Lopasic).

(PSYCHOTHERAPY) (PSYCHOLOGICAL TESTS)

KATJAR, Cs. 1951

(Physiol. Inst. U. of Pecs.)

"Sensitivity of the Denervated Bronchial Musculature."

Acta Physiol. Budapest, 1951, 3/1 suppl (13)

No abst. in Exc. Med.

KATKAYEV, N., leytenant.

From the first days on we implant firm skills in radio operators.  
Voen. sviaz. 16 no.2:33-34 P 58. (MIRA 11:3)

(Radio operators--Study and teaching)

L 18417-66 EWT(m)/EWA(d)/EWP(j)/T RM

ACC NR: AP6002551

(A)

SOURCE CODE: UR/0236/65/000/023/0047/0047

AUTHORS: Laukevits, Ya. Ya.; May, L. A.; Dreymanis, Ya. A.; Tutars, A. P.;  
Povzner, L. Yu.; Vayvad, A. Ya.; Katkevich, A. K.

ORG: none

TITLE: Method for producing surface-active silicone polymers. Class 39,  
No. 176683/2 (announced by Institute of Chemistry, Academy of Sciences Latvian SSR  
(Institut khimii Akademii nauk Latvyskoy SSR); Central Structural Bureau For  
Administration of the Chemical and Silicate-Ceramic Industry Sovnarkhoz, Latvian  
SSR (Tsentral'noye konstruktorskoye byuro upravleniya khimicheskoy i silikatno-  
keramicheskoy promyshlennosti sovnarkhoza Latvyskoy SSR)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 47

TOPIC TAGS: silicone, surface active agent, polymerization, esterification

ABSTRACT: This Author Certificate presents a method for producing surface-active  
silicone polymers by esterification with alcohols and subsequent hydrolysis and  
thermal condensation polymerization of a mixture of silicone monomers. To extend

Cord 1/2

UDC: 678 84:66.093.8

2

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ACC NR: AP6002551

and decrease the cost of the raw basis, a mixture of trimethylchlorosilane with silicon tetrachloride is taken as the silicone monomer. The esterification is produced with alcohols having more than three carbon atoms.

SUB CODE: 07, 11/ SUBM DATE: 02Jul64

Card 2/2 *mgs*

NIKOLAYEVA, M.G.; KATKEVICH, Yu.Yu.

Studying the effect of temperature on the respiration of dormant seeds.  
Fiziol. rast. 8 no.1:42-50 '61. (MIRA 14:3)

1. W. L. Komarov Botanical Institute, U.S.S.R. Academy of Sciences,  
Leningrad.

(Seeds) (Plants--Respiration)

(Plants, Effect of temperature on)



FENIN, L.F., inzh.; KATKEVICHYUS, L.A. [Katkevicius, L.], inzh.

Improvement of excessively wet soils by hydraulic filling.  
Gidr. i mel. 17 no.5:30-38 My '65. (MIRA 18:7)

KATKhanov, M.N.; DEMIDENKO, V.P.

Graphico-analytical calculation of the effect of dry friction forces in supports on the performance of a gyroscope. Izv. vys. ucheb. zav.; prib. 8 no.3:104-108 '65.

(MIRA 18:11)

1. Voyennaya artilleriyakaya akademiya.

KATKHOV, M. <sup>[v.]</sup> Eng. Maj. Cand Tech. Sci., Decent.

Automation in Artillery," from the book Modern Military Technology, 1956, page 195.

Translation 1114585

*KATKHA NOV, M.N.*

IVANOV, V.M., podpolkovnik, kandidat voyennykh nauk; KATKHA NOV, M.N.,  
inzhener-kapitan, kandidat tekhnicheskikh nauk; MARYSHEV, A.N.,  
polkovnik, redaktor; MEZHERITSKAYA, N.P., tekhnicheskii redaktor

[Russian artillery in concealed positions; history of shooting from  
concealed positions] Russkaia artilleriia na zakrytykh pozitsiakh;  
iz istorii strel'by s zakrytykh ognevykh positsii. Moskva, Voen.  
izd-vo M-va obor. SSSR, 1954. 60 p. [Microfilm] (MLRA 10:5)  
(Gunnery)

ACCESSION NR: AP4019002

S/0146/64/007/001/0111/0119

AUTHOR: Katkhanov, M. N.

TITLE: Engineering methods for selecting optimum parameters for gyros on the basis of economic and technical conditions

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 1, 1964, 111-119

TOPIC TAGS: gyro, gyro designing, gyro design method, gyro accuracy, gyro stability, gyro optimum parameter

ABSTRACT: Assuming that gyro-production cost statistics are available, an attempt is made to determine an optimum criterion of the gyro accuracy (considering its reduction during transportation, storing, and operation) at a minimum cost, weight, size, and maximum reliability. Lagrange's method of multipliers is used in this determination. A special coefficient  $\gamma$  is introduced which characterizes the relative angular velocity of precession of the external

Card 1/2

ACCESSION NR: AP4019002

gimbal per unit mass of the gyro. Simple formulas are derived for the maximum-accuracy-at-minimum-cost condition on the assumption that the reliability, weight, and size can be expressed through a universal cost characteristic. Orig. art. has: 4 figures and 15 formulas.

ASSOCIATION: Voyennaya artilleriyskaya akademiya (Military Artillery Academy)

SUBMITTED: 14May63

DATE ACQ: 23Mar64

ENCL: 00

SUB CODE: AE, CG

NO REF SOV: 002

OTHER: 000

Card 2/2

L 3835-66 ARG/ENT(d)/FBD/FBO/ENT(m)/EWP(w)/EPT(c)/FA/EWP(c)/EMP(v)/T-2/EMP(k)/  
LNP(h)/FCS(k)/EWA(h)/ETC(m) WJ/EM/WE

AM5025577

BOOK EXPLOITATION

UR/ 104  
355.9 100  
A49 B+1

Aleshkov, M. N. (Candidate of Technical Sciences, Engineer-Colonel); Vyskubov, B. R. (Engineer-Colonel); Zhukov, I. I. (Professor, Doctor of Technical Sciences, General Major of the I.T.S.); Katkhanov, M. N. (Doctor of Technical Sciences, Docent Engineer-Colonel); Kukushkin, D. D. (Candidate of Technical Sciences, Colonel); Markov, O. P. (Docent, Candidate of Technical Sciences, Engineer-Lieutenant Colonel); Savin, N. V. (Engineer-Colonel); Smirnov, A. D. (Engineer-Colonel); Fomin, Yu. G. (Candidate of Technical Sciences, Engineer-Colonel) 44 55

Physical principles of rocket weapons. (Fizicheskiye osnovy raketnoy oruzhiya) Moscow, Voenizdat M-va obor. SSSR, 1965. 463 p. illus., biblic. 12,000 copies printed.

TOPIC-TAGS: rocket, rocket flight, weapon, projected ammunition, jet engine, rocket propellant, combustion chamber, engine fuel system, rocket guidance, missile ground equipment, rocket engine test, jet propulsion

PURPOSE AND COVERAGE: The book presents the principles of the theory of flight, the physical principles of jet propulsion, describes rocket engines and fuels, Card 1/3

L 3835-66  
AM502557?

3

and control and guidance systems of various types. It also describes the working principle of rockets of various types and their basic equipment, and the designs of ground equipment and the tests of rocket complexes. It also contains a classification of rocket equipment. The book is intended for officers connected with the manufacture of rocket equipment, and for students of military educational institutions. The contents of the book is based on materials of overt Soviet and foreign publications.

TABLE OF CONTENTS (abridged):

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AM5025577

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Ch. XI. Rocket combat units -- 427

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SUB CODE: GM, WA

NO REF SOV: 035

SUBMITTED: 30Mar65

OTHER: 042

  
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ALL INFORMATION CONTAINED

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ACCESSION NR: AP5016470

Encl: 01

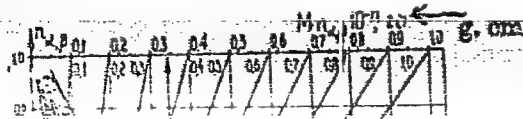


Fig. 1. Nomogram of frictional moment efficiency.  $M$  - total value of the moment.

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Card 3.5

KATKHE 0-1

Equation of state and the thermodynamic properties of  
interacting and noninteracting particles  
U. I. Katskhelashvili, Zhur. Tekh. Fiz. 1978, 54, 10, 1911-1918

1/11/1955  
KAZAVCHINSKIY, Ya.; KATKHE, O.

Calculation of the saturated vapor elasticity curve. Khol.tekh.  
32 no.2:53-58 Ap\*Je '55. (MIRA 8:10)  
(Vapor pressure)

AID P - 4802

Subject : USSR/Engineering

Card 1/2 Pub. 110-a - 5/17

Authors : Kazavchinskiy, Ya. Z., Dr. Tech. Sci., and O. I. Katkhe, Eng.

Title : Calculation of caloric values of imperfect gases, according to the given p, v, T by the method of graphic differentiation.

Periodical : Teploenergetika, <sup>3</sup>N 7, 23-26, J1 1956

Abstract : The calculation of the caloric values of imperfect gases at the given p, v, T is usually made with the help of W. E. Deming's and L. E. Shupe's method. The authors consider that this method leads to grave errors and is inadequate at the supercritical pressures. They present here a new method based on the development of a new system of equations for imperfect gases. This method can be used in the whole range of temperature changes, as well as of variations in density. Tables, diagrams.

AID P - 4802

Teploenergetika, 7, 23-26, J1 1956

Card 2/2 Pub. 110-a - 5/17

9 references (5 Russian).

Institution : Odessa Institute of Naval Engineers

Submitted : No date



GAVRILENKO, L., kandidat tekhnicheskikh nauk; ~~KATKHE~~, O., inzhener.  
SHESTOPALOV, V., inzhener; CHAMORTSEV, I., inzhener.

Ways of decreasing the consumption of lubricating oils in 8DR  
43/61 engines. Mor.flot. 16 no.1:26 Ja '56. (MLRA 9:5)

1. Odesskiy institut inzhenerov morskogo flota (for Katkhe);
2. Chernomorskoye parokhodstvo (for Shestopalov, Chamortsev).  
(Lubrication and lubricants) (Diesel engines)

KATKHE, O.I.

Equations of state for carbon dioxide and water vapor. Inzh.-fiz.zhur.  
no.5:95-98 My '58. (MIRA 12:1)

1. Institut inzhenerov morskogo flota, g. Odessa.  
(Carbon dioxide) (Water vapor)

AUTHOR: Kazavchinskiy, Ya.Z., Dr.Tech.Sci. SOV/06-58-7-7/22  
and Katkhe, O.I., Engineer.

TITLE: The equation of state for steam (Uravneniye sostoyaniya dlya vodyanogo para.)

PERIODICAL: Teploenergetika, 1958, Vol. 5, No.7., pp. 26-30 (USSR)

ABSTRACT: In a previous article in Teploenergetika No.7., 1958, the formulation of the equation of state for steam was based on reference thermal data obtained by graphical-analytical consideration of experimental data. The equation of state is given in dimensionless co-ordinates. It is then converted into a form convenient for the calculation of thermal and calorific values, and consists of four functions, each of which depends on only one variable. These are termed the elementary functions of the equation of state; three depend only on the density, and one only on the temperature. Three are found as series of powers, by a procedure which is not quite the same as previously. The methods of obtaining the elementary functions are explained. The final equation of state is derived and is subjected to detailed checking; the results of which are given. Calculated and reference values of the dimensionless complex  $pv/RT_k$  are given in Table.1; differences up to 0.3% are found in some cases. Table.2. gives a comparison of calculated and skeleton table data of this dimensionless complex in the sub-critical region; agreement is good.

Card 1/2

The equation of state for steam.

SOV/96-58-7-7/22

A similar comparison for enthalpy is given in Table.4., and the differences are acceptable. Specific heats at constant pressure are compared in Table.5: the values differ from those of other authors by not more than 2% over most of the range, but the difference is 6 - 12% near the saturation curves at sub-critical pressures and near the maxima at super-critical pressures. It is remarked that experimental determinations are, of course, particularly difficult in these regions. There are 5 tables and 12 literature references (7 Soviet, 4 English and 1 German)

ASSOCIATION: Odeskiy Institut Inzhenerov Morskogo Flota (Odessa Institute of Marine Engineers)

1. Steam - Mathematical analysis
2. Equations of state - Applications
3. Steam - Specific heat

Card 2/2

84263

S/170/60/003/010/008/023 X  
B019/B054

5.4700

AUTHOR: Katkhe, O. I.

TITLE: Some Thermodynamic Properties<sup>71</sup> of Carbon Dioxide<sup>1</sup> in the Supercritical Range

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 10, pp. 60 - 62

TEXT: In the present paper, the author gives values for the specific volume and the specific heat  $c_p$  of carbon dioxide for the temperature range from 31.04°C to 60°C and pressures from 76 to 200 kg/cm<sup>2</sup>. The values were obtained from the equation of state (1) for carbon dioxide previously derived (Refs. 1,2).

$$PV/RT_k = 1 - 1.25797\omega + 0.54602\omega^2 + 0.02722\omega^4 - 0.05438\omega^6 + 0.01361\omega^8 + (1 + 0.6645\omega + 0.276\omega^2 + 0.047525\omega^4) \cdot (\tau - 1) - 0.34(1/\tau^3 - 1) (\omega - 0.80992\omega^2 - 0.5203\omega^4 + 0.3953\omega^6 + 0.0651\omega^8) \quad (1), \text{ where } \omega = v_k/v \text{ and}$$

Card 1/2

84263

Some Thermodynamic Properties of Carbon  
Dioxide in the Supercritical Range

S/170/60/003/010/008/023X  
B019/B054

$\tau = T/T_k$ . The calculation of  $c_p$  is described in detail. The error of the values indicated is  $\pm 3\%$ . There are 1 table and 3 Soviet references.

ASSOCIATION: Institut inzhenerov morskogo flota, g. Odessa (Institute  
for Engineers of the Sea-going Fleet, Odessa)

SUBMITTED: March 28, 1960

X

Card 2/2

AKSEL'BAND, A.M., kand.tekhn.nauk; KATKHE, O.I., kand.tekhn.nauk

Ultrasonic pulse converter for the prevention of scale formation  
in marine steam boilers. Sud.sil.ust. no.1:179-189 '61.

(MIRA 15:7)

1. Kafedra sudovykh parosilovykh ustanovok Odesskogo instituta  
inzhenerov morskogo flota (for Aksel'band). 2. Zaveduyushchiy  
NIS Odesskogo instituta inzhenerov morskogo flota (for Katkhe).

(Boilers, Marine)

(Ultrasonic waves--Industrial applications)

VOLYNSKIY, F.A.; POPOVKIN, Ye.M.; MAKARENKO, I.V.; PAVLOVA, A.I.; SHEVCHUK, P.Ye.; KATKHE, V.L.

Profound study of afferent (spinal) innervation of the internal organs. Arkh. anat., gist. i embr. 47 no.12:64-76 D '64.

(MIRA 18:4)

1. Kafedra normal'noy anatomii (zav. - zasluzhennyi deyatel' nauki prof. F.A.Volynskiy) Odesskogo gosudarstvennogo meditsinskogo instituta imeni Pirogova.



KATKO, Bertalan; TOTH, Pal

Study trip on aviation meteorology to Czechoslovakia. Idojaras  
68 no.6:382-383 N-D '64.

A flight trip as seen by a meteorologist. Ibid.:383-384

MININ, A.N., dotsent, kand. tekhn. nauk; KAT'KO, L.T., inzh.

New material for floors made from industrial wastes. Stroi.  
mat. 9 no.6:16-18 Je '63. (MIRA 17:8)

KATKOV, A., prepodavatel'

Automobile constructed by students. Tekh. mol. 28 no. 3:16-17 '60.  
(MIRA 14:4)

(Automobiles—Design and construction)

YAROSHEVSKIY, I.M., inzh.; KATKOV, A.M., inzh.

Noise suppressor for the "Mars" transmitter-receiver unit.  
Avtom., telem. i svyaz' 9 no.10:23-24 0 '65.

(MIRA 18:11)

1. Tsentral'naya stantsiya svyazi Ministerstva putay soob-  
shcheniya SSSR.

KATKOV, A.M.; YAROSHEVSKIY, I.M.

Inspection and repair of the O4R1 radio transmitter. Avtom.,  
telem. i sviaz. 9 no.1:31-34 Ja '65. (MIRA 18:2)

1. Starshiy inzh. TSentral'noy stantsii svyazi Ministerstva  
putey soobshcheniya (for Katkov). 2. Nachal'nik tsekha  
TSentral'noy stantsii svyazi Ministerstva putey soobshcheniya  
(for Yaroshevskiy).

KATKOV, B. P.

Ensilage

Time for storing sunflower into silos. Korm. baza, No. 11, 1951

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

KATKOV, B.P., CHIRKOVA, T.V.

Irrigation Farming

Cultivation of ensilage sunflower on irrigated land, Korm. baza 3 No. 4, 1952

Monthly List of Russian Accessions, Library of Congress

July, 1952 UNCL

KATKOV, B. P.

Melons

Cultivation of melons for feed in southeastern Russia. Sots.zhiv. 14 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.



Country : USSR  
Category: Cultivated Plants. Fodders.

M

Abs Jour: RZhBiol., No 11, 1958, No 49002

Author : Katkov, D.P.  
Inst : Chkalov Sci. Res. Inst. of Dairy and Meat Cattle  
Raising.  
Title : Feed Water Melon and Problems of Succulent Fodder in the  
Southeast.

Orig Pub: Tr. Chkalovskiy n.-i. in-t molochno-myasn. skotovodstva,  
1956, vyp. 10, 101-108

Abstract: Experimentation through many years at the Chkalov  
Institute of Dairy and Meat Cattle Raising shows  
that feed water melon is a drought resistant pro-  
ductive culture in the arid regions of the Southeast.  
Average yield of feed water melon in 1953 from 200 ha.

Card : 1/2

M-96

Country : USSR  
Category: Cultivated Plants. Fodders.

M

APPROVED FOR RELEASE: 06/13/2000 : CIA-RDP86-00513R000721120004-4"

Abs Jour: RZhBiol., No 11, 1958, No 49002

comprised 200 cwt/ha.; from the best plot the yield  
was 500 cwt/ha. The article describes the agro-  
techniques of cultivating water melons in the regions  
of the Southeast. The early variety of feed water  
melons, Brodskiy 37-42, developed by the Institute  
will permit organization of native seed growing. --  
Ye. T. Zhukovskaya

Card : 2/2

M

Country : USSR

Category: Cultivated Plants. Fodders.

Abs Jour: RZhDiol., No 11, 1958, No 49001.

Author : ~~Kotkov~~, D.P.; Chirkova, T.V.

Inst : Chkalovskiy Sci. Res. Inst. of Dairy and Meat  
Cattle Raising.

Title : Biological Characteristics in the Development of  
Pumpkin and Feed Water Melon.

Orig Pub: Tr. Chkalovskiy n.-i. in-t molochno-mysn.  
skotovodstva, 1956, vyp. 10, 109-115.

Abstract: This article describes a study of diurnal growth  
increment in length in the vines of water melon and  
pumpkin of Pepo and Maxim species. The fruit setting  
and increase in the weight of the fruit were also  
studied. In the Pepo pumpkin, a relatively early

Card : 1/2

M-95

USSR/Cultivated Plants .. Commercial. Oil-bearing. Sugar-bearing. 11.

Abs Jour : Ref Zhur - Biol., No 10, 1956, 4247

Author : Katkov, B.P.

Inst : Chkalovskiy Scientific Research Institute for Dairy and Meat Cattle Raising.

Title : The Seeds of the Fodder Melons and Gourds as Sources of Vegetable Fat.

Orig Pub : Tr. Chkalovskiy n.-i. inst. melochno-myasn. skotovodstva, 1956, vyp. 10, 117-120.

Abstract : The seeds of pumpkin, water melon and other fodder melon and gourd crops may be a source of valuable vegetable fat for nutritional and industrial uses. Thus, for example, pumpkin seeds have a fat content of 50% (on the basis of absolutely dry kernel). With regard to the fat content

Card 1/2

- 123 -

Country : USSR  
Category: Soil Science. Mineral Fertilizers.  
Abs Jour: RZhBiol., No 14, 1958, No 63068.  
Author : Katkov, B.P.; Chirkova, T.V.  
Inst : Chkalov Scientific-Research Institute of  
Milk-Meat Animal Husbandry.  
Title : On the Problem of the Effectiveness of Mineral and  
Organic Fertilizers in the Steppe Zone of Zavolzh'ya  
Orig Pub: Tr. Chkalovskiy a -i. in-t nolochno-lyasn skoto-  
vodstva, 1956, vyp. 10, 157-162  
Abstract: In 1953 on the experimental farm of the Chkalov  
Scientific-Research Institute of Milk-Meat Animal  
Husbandry, a study was made of the effectiveness  
of various doses of mineral and organic fertilizers  
on the harvest of the green mass and the yield of  
Card : 1/2

BORTNICHUK, N.Ya., inzh.; BRONSHTEYN, A.M., kand.tekhn.nauk; BYSTRITSKIY, Kh.Ya., inzh.; DUBROVSKIY, Z.M., inzh.; KATKOV, B.S., inzh.; KRASKOVSKAYA, S.N., inzh.; OSIPOV, S.I., inzh.; PERTSOVSKIY, M.L., inzh.; RAKOV, V.A., inzh.; REBRIK, B.N., kand.tekhn.nauk; SUYETIN, T.A., kand.fiziko-matem.nauk; KHITROV, P.A., tekhn.red.

[Electric locomotives operating on alternating current with  
ignitrons] Elektrovozy peremennogo toka s ignitronami. Pod ob-  
shchei red. V.A.Rakova. Moskva, Gos.transp.zhel-dor.izd-vo, 1959.  
286 p. (MIRA 12:10)

(Electric locomotives)

BRONSHTEYN, Anatoliy Markovich; KATKOV, Boris Semenovich; BRONFMAN,  
Aron Iosifovich; SIDOROV, N.I., inzh., red.; BOBROVA, Ye.N.,  
tekhn.red.

[Main switches and arresters of a.c. electric locomotives]  
Glavnye vykliuchateli i razriadniki elektrovozov peremennogo  
toka. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-vs putei  
soobshchenia, 1960. 54 p. (MIRA 13:4)  
(Electric locomotives)

RODOV, B.Ya.; SELEGDINOV, A.S.; KATKOV, D.L.

Air fountain dryer. Med.prom. 14 no.11:20-21 N '60.

(MIRA 13:11)

1. Khimiko-farmatsevticheskiy zavod "Farmakon."  
(BIOLOGICAL PRODUCTS--DRYING)

KATKOV, F. A.

Electrical Engineering Abstracts  
May 1954  
Reactors and Relays

2837. Frequency relay without contacts. F. A. Katkov. *Elektricheskoye*, 1953, No. 10, 40-41, 1 fig.

*Russian.*  
An armature held on a loaded string vibrates between coils of two electromagnets polarized by a permanent magnet. To one coil is applied a voltage of the controlled frequency. Vibration of the armature, and thus the phase and magnitude of the resultant voltage induced in the second coil depend upon the mechanical loading of the string and on the frequency of the applied voltage. At normal frequency, the vibration of the armature is only 20% of the maximum. When frequency falls to a preset value indicated on a suitably calibrated loading device—vibration rises rapidly and the resulting rise of voltage in the second coil is used to control operating relays. A slight rise of frequency above critical decreases output voltage sufficiently to release operating relays. Errors due to variation over a wide range of controlled voltage and ambient temperature are very small.

J. LUKASZEWICZ

9-21-54



KATKOV, F.A.

Electromagnetic frequency multipliers as voltage stabilizers. Shor.  
trud. Inst. elektrotekh. AN URSS no. 12:99-107 '55. (MLRA 9:11)  
(Radio--Apparatus and supplies)  
(Voltage regulators)

KATKOV, K.A.

Elements of the theory of contactless narrow-band frequency relays.  
Avtomatyka no.2:64-73 '56. (MLRA 9:10)

1.Kiiv's'kiy ordena Lenina politekhnicheskiiy institut.  
(Electric relays)

KATKOV, F.A.

Development of frequency systems for remote control. Izv. KPI  
25:485-498 '57. (MIRA 11:6)

1. Kafedra avtomatiki i telemekhaniki Kiyevskogo politekhnicheskogo  
instituta.

(Remote control)

9(2)

AUTHOR:

Katkov, F.A.

SOV/142-58-6-5/20

TITLE:

A High Stability Reed Generator for Frequency Systems of Remote Control (Vysokostabil'nyy yazychkovyy generator dlya chastotnykh sistem teled upravleniya)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 6, pp 665-668 (USSR)

ABSTRACT:

The article describes a high-stability reed generator for use in frequency systems of remote-control with narrow-band frequency relays, the relative operating band-width of which is equal to 1.5 - 2.0%, in which case instability of the frequency generator must not exceed +2%. A reed generator satisfying these specifications was developed at the Chair of Automation and Telemechanics of the Kiyev order of Lenin Polytechnic Institute. The generator consists of two elements; a reed vibrator, and a transistor triode (Figure 1). Experiments have shown that variations in load re-

Card 1/3

SOV/142-58-6-5/20

A High Stability Reed Generator for Frequency Systems of Remote Control

sistance of 2 or 3 times the normal value, and changes in the power supply voltage by  $\pm 20\%$  alter the frequency of the generator by no more than  $\pm 0.05\%$ . With the usual carbon-steel reed, lowering the temperature from  $+50$  to  $-5$  deg C, raises the frequency of the generator by  $0.01\%$  per  $^{\circ}\text{C}$ : below  $-5$  deg C the frequency change increment increases to  $0.15 - 0.25\%$ . Using the heat-compensated alloy EI-25 the frequency change increment does not exceed  $0.002\%$ . Through a series of computations the author determines the expressions for the value of current in the excitation winding of the vibrator (eq 1), the excitation current (eq 4), and the essential conditions for self-excitation of the vibrator (eq 9) among other things. Conditions for self-excitation are briefly discussed further in terms of circuit parameters. It is pointed out, in conclusion, that this apparatus

Card 2/3

SOV/142-58-6-5/20

A High Stability Reed Generator for Frequency Systems of Remote Control

may be simply switched from operation as a generator to operation as a frequency relay, as shown in the circuit of figure 5. This article is recommended by the Kafedra avtomatiki i telemekhaniki Kievskogo ordena Lenina politekhnicheskogo instituta (Chair of Automation and Telemechanics of the Kiyev order of Lenin Polytechnic Institute). There are 2 circuit diagrams, 3 graphs, and 2 Soviet references.

SUBMITTED: March 4, 1958 (initially)  
June 24, 1958 (after revision)

Card 3/3

KATKOV, F. A., Doc Tech Sci (diss) -- "Theoretical principles, development, and investigation of multifrequency narrow-band systems of remote control". Kiev, 1959. 15 pp (Kiev Order of Lenin Polytech Inst), 150 copies (KL, No 24, 1959, 133)

KATKOV, P.A. (Kiyev)

Multifrequency pulse devices for remote control [with summary in  
English]. Avtom. i telem. 20 no.1:54-61 Ja '59. (MIRA 12:1)  
(Remote control)



8(6) 16.9500

67858  
SOV/143-59-12-8/21

AUTHOR: Katkov, F.A., Docent, Candidate of Technical Sciences  
TITLE: Non-Contact Coders and Decoders in Frequency Combination Remote Control Systems q  
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy: Energetika, 1959, Nr 12, pp 62-65 (USSR)  
ABSTRACT: This is a description of non-contact coders and decoders which are designed and used by the author's chair to improve the working of remote-control telephone exchanges. Figure 1 shows the layout of a non-contact frequency combination coder: KU - non-self-resetting control keys, G - generators of frequency signals, S - capacitors, V<sub>1</sub> - germanium diodes, R - limiting resistances, U - amplifier. Figure 2 shows the decoder: MU - magnetic amplifiers, RI - executive relays, ChF - frequency filters, V - rectifiers, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> - resistances of the

Card 1/2

67858  
SOV/143-59-12-8/21

Non-Contact Coders and Decoders in Frequency Combination Remote Control Systems

decoder and control winding of the magnetic amplifier.  
D - diodes. Formulae are given for determining various  
signal magnitudes. There are 3 circuit diagrams, 1  
graphs and 3 Soviet references. ✓

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskij institut  
(Kiyev Order of Lenin Polytechnical Institute)

SUBMITTED: August 12, 1959, by the Kafedra avtomatiki i telemekha-  
niki (Chair of Automatic Equipment and Telemechanics).

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/5692

Katkov, Fedor Aleksandrovich

Mnogochastotnyye uzkopolosnyye sistemy teleupravleniya (Multifrequency Narrow-Band Systems in Remote Control) Kiyev, Gostekhizdat UkrSSR, 1960. 207 p. 5,000 copies printed.

Ed.: M. Pisarenko; Tech. Ed.: S. Matusevich.

PURPOSE: This book is intended for scientific and technical personnel engaged in the development, design, and operation of remote control systems. It may also be useful to students of these subjects in schools of higher education.

COVERAGE: The book examines multifrequency narrow-band remote control systems, the fundamentals of their theory and the principles of their construction. The basic elements and units of multifrequency remote control systems are described. No personalities are mentioned. There are 9 references, all Soviet.

Card 1/5

S/194/62/000/006/224/232  
D256/D308

AUTHORS: Katkov, F.A., and Popov, A.B.

TITLE: Using busy telephone lines for sending frequency signals of remote control and remote signalling

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-8-7 kh (Tr. Kiyevsk. politekhn in-ta, Sb. statey elektrotekhn. fak., Kiev, 1961, 220-227)

TEXT: Various methods of sending remote control and remote signalling (RC-RS) impulses by telephone communication lines are considered using hyper-audio and sub-audio frequencies as well as artificial lines with multifrequency narrow-band systems. Circuit diagrams for RC-RS cutting-in systems are presented as well as circuit diagrams of a transistorized generator and a receiver. Practical suggestions are included concerning the construction of such circuits. It is pointed out that the most suitable for RC-RS systems is the band from 300 to 500 c/s for direct use, and the band from 2400 to 3200 c/s using RC-RS frequency signals ranging from Card 1/2

Using busy telephone lines for ...

S/194/62/000/006/224/232  
D256/D308

100 to 300 c/s on a carrier frequency of 2800 c/s. [Abstracter's  
note: Complete translation.]

Card 2/2

DIDYK, B.S. (Kiyev); KATKOV, F.A. [Katkov, F.O.] (Kiyev)

Code frequency-combination telemetry system. Avtomatyka  
no.2:69-72 '62.

(MIRA 15:5)

(Telemetering)

KATKOV, F.A., kand.tekhn.nauk; STULOV, V.A., inzh.

Alternate-message frequency code and its realization.  
Izv. vys. ucheb. zav.; energ. 5 no.10:22-32 0 '62.

(MIRA 15:11)

1. Kiyevskiy ordena Lenina politekhnicheskoy institut.  
Predstavlena kafedroy avtomatiki i telemekhaniki.  
(Remote control) (Telecommunication)

KATKOV, Fedor Aleksandrovich, kand. tekhn. nauk; POPOV, Aleksey  
Borisovich, inzh.; IL'IN, A.A., kand. tekhn. nauk,  
retsenzent; KOVAL'CHUK, A.V., inzh., red. izd-va;  
STARODUB, T.A., tekhn. red.

[Frequency remote control systems using busy communication  
channels] Chastotnye sistemy teleupravleniia po zaniatym  
kanalam sviazi. Kiev, Gostekhnizdat USSR, 1963. 86 p.  
(Remote control) (Telephone) (MIRA 16:7)



AM4006614

BOOK EXPLOITATION

S/

Katkov, Fedor Aleksandrovich (Candidate of Technical Sciences)

Remote control; theoretical principles (Teleupravleniye; osnovy\* teorii) Kiev, Gostekhizdat UkrSSR, 63. 0231 p. illus., biblio. 7,000 copies printed.

TOPIC TAGS: remote control, remote signalization, telemetry, communication channel, selective switching, contact making system, contactless system, frequency control, time control, frequency and time control

PURPOSE AND COVERAGE: The book contains an exposition of the theory of remote control and the principles of the construction of contact-making and contactless pulsed and frequency remote control systems for commercial purposes. The book is intended for engineering, technical, and scientific workers engaged in the design and application of remote control apparatus, and can also be useful to stu-

Card 1/3

AM4006614

dents in higher educational institutions, specializing in the field of automation and telemechanics. Section of Chapter IV was written by the author in collaboration with engineer V. A. Stulov. Section 3 of Chapter VIII was written by engineer A. B. Popov, while Section 4 of the same chapter by engineer B. S. Didy\*k.

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Ch. II. General information on the theory of information-transmission and communication channels - - 26

Ch. III. Fundamentals of the theory of selective switching - - 49

Ch. IV. Methods of code formation - - 66

Ch. V. Principal elements and units of contactless remote-control and remote signalization systems - - 106

Card 2/3

AM4006614

Ch. VI. Frequency and frequency-time remote-control and remote-signalization systems - - 142

Ch. VII. Time-governed remote-control and remote-signalization systems - - 179

Ch. VIII. Comprehensive frequency and frequency-time remote-control and remote-signalization systems and telemetering systems with automatic dispatching - - 198

Literature - - 229

SUB CODE: CO, CG, SD

SUBMITTED: 19Jul63

NR REF SOV: 019

OTHER: 003

DATE ACQ: 20Dec63

Card

3/3

I. 11179-62

EWI(d)/BDS/ZET-2--AFFTC/ASD--Pj-l

ACCESSION NR: AP3001546

S/0143/63/000/004/0028/0033

AUTHOR: Didyuk, B. S. (Engineer); Katkov, F. A. (Docent)

TITLE: Contactless matrix-type decoders<sup>8</sup> in frequency-combination telemeters<sup>8</sup>

SOURCE: IVUZ. Energetika, no. 4, 1963, 28-33

TOPIC TAGS: matrix frequency decoder, frequency-combination telemeter

ABSTRACT: Advantages of a telemeter that uses continuous signal transmission by sending combinations of  $n$  frequencies  $m$  at a time are indicated. A transistorized frequency-combination decoder with magnetic amplifiers and signal-lamp reading developed by the authors is described. The laboratory model included 1  $\mu$  and P-4 transistors. Its simplified circuit diagram is presented. It is claimed that the decoder can operate on many frequencies, is quick-acting, and highly reliable. Orig. art. has: 4 figures, 11 formulas, and 1 table.

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskoy institut, Kafedra avtomatiki i telemekhaniki (Kiev Polytechnic Institute, Chair of Automation and Telemechanics)

Card 1/21

KATKOV, F.A., kand.tekhn.nauk, dotsent; KRAVCHENKO, L.D., inzh.

Contactless stages of frequency-composite remote control and  
signaling systems using transfluxors. Izv. vys. ucheb. zav.;  
energ. 6 no.7:37-43 J1 '63. (MIRA 16:8)

1. Kiyevskiy ordena Lenina politekhnicheskoy institut. Predstavlena  
kafedroy avtomatiki i telemekhaniki.  
(Automatic control) (Magnetic circuits)

סמך, סמך, סמך

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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tion rule. In the first case, the number of frequencies in

is the number of frequencies in the number of frequencies in

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identical frequencies, the number of CC in permutations and combinations will be.

$M = C_n^m \cdot A_n^{m-1}$  and  $M = \frac{P}{n} \cdot C_n^m \cdot C_{n-m}^{m-1}$  respectively, where P is the number of



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groups, is equal

$G_k$

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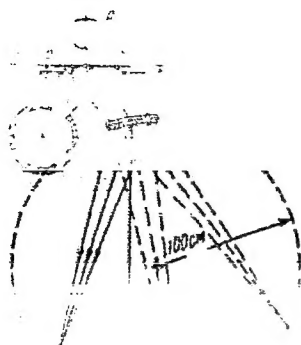


Fig. 1. Diagram of the installation

S - source  
C - quartz single crystal  
D - slit  
D' - lead diaphragm

DIDYK, B.S., inzh.; KATKOV, F.A., kand.tekhn.nauk, dotsent

Discrete frequency combination telemetering system with group  
coding. Izv. vys. ucheb. zav.; energ. 6 no.10:125-130 0 '63.  
(MIRA 16:12)

1. Kiyevskiy ordena Lenina politekhnicheskoy institut.  
Predstavlena kafedroy avtomatiki i telemekhaniki.

MIKHAYLOV, Ivan Ivanovich, inzh.; KATKOV, F.A., doktor tekhn.  
nauk, reitsenzent

[Telemetering equipment with digital recording] Apparatura  
teleizmereniia s tsifrovym otschetom. Kiev, Tekhnika,  
1964. 121 p. (MIRA 17:11)